

IN THE CLAIMS:

Claims 1-88, 94-99, 107-109, 128-130, 133, 141-144, 151-153, 159, 164 and 165 were previously cancelled. Claims 89 and 146-150 are currently amended. Claims 92 and 110 are currently cancelled. Claims 90, 102-106, 111-117, 124, 125, 127, 136-140, 157, 158, 160-163, 166 and 167 are withdrawn. Claims 91, 93, 100, 101, 118-123, 126, 131, 132, 134, 135, 145 and 154-156 are carried forward, all as follows:

Claims 1-88 (Cancelled)

89. (Currently Amended) A device for transporting reels of material comprising:

a reel preparation station adapted to prepare said reels of material to form prepared reels of material;

an intermediate reel storage area adapted to receive and to store a plurality of said prepared reels of material received from said reel preparation station, each of said prepared reels of material having a reel width in an axial direction of each said reel of material and a reel diameter;

a plurality of primary transport carriages, each said primary transport carriage being adapted to support one of said reels of material in said reel preparation station, during movement of each one of said prepared reels of material directly from said reel preparation station to said intermediate reel storage area and also in said intermediate reel storage area;

a web-processing machine including at least one web-processing station and a reel changer having an uploading and unloading position, said at least one web-processing station and said reel changer being arranged sequentially in a longitudinal direction of web travel through said web-processing machine, said intermediate reel storage area being located adjacent to, and before said reel changer of said web-processing machine;

a single, straight transport route extending directly from said intermediate reel storage area to said reel changer in said web-processing machine, said single, straight transport route being aligned with said longitudinal direction of web travel through said web-processing machine;

at least one secondary transport carriage supported for movement along said single, straight transport route, said at least one secondary transport carriage being adapted to receive one of said primary transport carriages and its supported one of said prepared reels of material, directly from said reel preparation station and to transport each said primary transport carriage and its supported one of said prepared reels of material directly to said intermediate reel storage area from said reel preparation station along said single, straight transport route and further being adapted to transport each said primary transport carriage, and its supported one of said prepared reels of material, directly between said intermediate reel storage area, along said single, straight transport route to said uploading and unloading position of said reel changer;

a plurality of reel storage spaces in said intermediate reel storage area, said plurality of reel storage spaces including a first group of reel storage spaces located on

a first side of said single, straight transport route and a second group of said plurality of reel storage spaces located on a second, opposite side of said single, straight transport route, at least two of said reel storage spaces in each of said first and second groups of said reel storage spaces being aligned directly one in front of the other in said longitudinal direction of said web processing machine; said at least two longitudinally aligned ones of said plurality of reel storage spaces in each of said first and second groups of reel storage spaces each having a storage space width, in a direction transverse to said longitudinal direction of web travel, to each store at least one of said prepared reels of material received transported directly to each said reel storage space from said reel preparation station and to be transported directly from each said reel storage space to said reel changer by one of said primary transport carts loaded onto said secondary transport carriage;

a separate branch transport line extending perpendicular from said single, straight transport route into each of said plurality of reel storage spaces in each of said first and second groups, a spacing between adjacent ones of said branch transport lines in said aligned reel storage spaces in each of said first and second groups being greater than said reel diameter, at least two of said adjacent ones of said reel storage spaces in each of said first and second groups being adapted to each store said at least one of said prepared reels of material received from said reel preparation station and supported on ones of said primary transport carriages; and

a primary transport carriage drive means in a majority of said at least two of said reel storage spaces in each of said first and second groups,

90. (Withdrawn) The device of claim 89 wherein each of said primary transport carriages is assigned to a fixed one of said plurality of reel storage spaces in said intermediate reel storage area.

91. (Previously Presented) The device of claim 89 wherein two of said primary transport carriages can be supported on said at least one secondary transport carriage.

92. (Cancelled)

93. (Previously Presented) The device of claim 89 wherein said plurality of reel storage spaces are arranged parallel to said direction of web travel and before said web-processing machine.

94-99. Cancelled.

100. (Previously Presented) The device of claim 89 wherein all of said reels of material are prepared with splices.

101. (Previously Presented) The device of claim 89 wherein one of said primary transport carriages is positionable in each said reel storage space.

102. (Withdrawn) The device of claim 101 wherein any ones of said primary transport carriages is reusable in any one of said plurality of reel storage spaces.

103. (Withdrawn) The device of claim 89 further including a reel of material unpacking station in said reel preparation station and wherein each of said of primary transport carriages can be moved to said unpacking station.

104. (Withdrawn) The device of claim 103 further including a splice preparation station in said reel preparation station and wherein each of said primary transport carriages can be moved to said splice preparation station.

105. (Withdrawn) The device of claim 104 wherein said splice preparation station includes said unpacking station.

106. (Withdrawn) The device of claim 89 wherein said transport route is a virtual extension of said direction of web travel.

107-110. (Cancelled)

111. (Withdrawn) The device of claim 89 further including a position-sensing system provided along at least a portion of said transport route and usable for precise positioning of said at least one secondary transport carriage.

112. (Withdrawn) The device of claim 89 further including a secured area positioned around said storage area.

113. (Withdrawn) The device of claim 112 further including a perimeter fence defining said secured area.

114. (Withdrawn) The device of claim 112 further including a reel changer area security system and forming said secured area.

115. (Withdrawn) The device of claim 112 wherein said secured area includes at least one transfer channel.

116. (Withdrawn) The device of claim 115 further including one of photoelectric beams and ultrasound sensors in said secured area at said transfer channel.

117. (Withdrawn) The device of claim 116 wherein said one of said photoelectric beams and ultrasound sensors are arranged at different levels.

118. (Previously Presented) The device of claim 89 further including a plurality of said web-processing stations arranged one in front of the other in said direction of web travel.

119. (Previously Presented) The device of claim 89 wherein said at least one web-processing station is a printing couple of a rotary printing press.

120. (Previously Presented) The device of claim 119 wherein said printing couple defines a horizontal web path.

121. (Previously Presented) The device of claim 89 wherein said intermediate reel storage area is a FIFO storage area.

122. (Previously Presented) The device of claim 89 further including a web-processing machine control center adjacent said intermediate reel storage area.

123. (Previously Presented) The device of claim 89 further including wheels on each of said plurality of primary transport carriages.

124. (Withdrawn) The device of claim 89 further including wheels on said secondary transport carriage and rails defining said transport route and adapted to receive said wheels.

125. (Withdrawn) The device of claim 124 further including primary transport carriage receiving rails on said secondary transport carriage.

126. (Previously Presented) The device of claim 123 further including a primary transport carriage chain drive.

127. (Withdrawn) The device of claim 125 wherein said primary transport carriage receiving rails on said secondary transport carriage are spaced at a distance from each other.

128-130. (Cancelled)

131. (Previously Presented) The device of claim 89 wherein each of said plurality of reel storage spaces accommodates at least a single one of said primary transport carriages.

132. (Previously Presented) The device of claim 89 wherein others of said plurality of reel storage spaces accommodate at least two of said primary transport carriages.

133. (Cancelled)

134. (Previously Presented) The device of claim 131 wherein all of said plurality of reel storage spaces accommodate at least two of said primary transport carriages.

135. (Previously Presented) The device of claim 89 wherein each of said primary transport carriages is adapted to accommodate a partial reel of material.

136. (Withdrawn) The device of claim 89 further including a second reel storage area, each of said intermediate reel storage area and said second reel storage area being provided with a separate one of said at least one secondary transport carriage.

137. (Withdrawn) The device of claim 136 further including two secondary transport carriage transport routes arranged parallel to each other.

138. (Withdrawn) The device of claim 136 wherein said intermediate reel storage area and said second reel storage areas are connected to each other by a track.

139. (Withdrawn) The device of claim 136 further including a splice preparation area between said intermediate reel storage area and said second reel storage area.

140. (Withdrawn) The device of claim 139 wherein said secondary transport carriage is adapted to transport splice-prepared reels of material to said intermediate reel storage area.

141-144. (Cancelled)

145. (Previously Presented) The device of claim 89 wherein spacings of all of said reel storage spaces are greater than said reel diameter.

146. (Currently Amended) The device of claim 89 wherein all of said reel storage spaces are each sized to store two of said prepared reels of material.

147. (Currently Amended) The device of claim 89 wherein at least three of said reel storage spaces are arranged in each of said first and second groups of reel storage spaces on both of said first and second sides of said transport route.

148. (Currently Amended) The device of claim 89 wherein at least two adjacent ones of said reel storage spaces are adapted to store new ones of said prepared reels of material.

149. (Currently Amended) The device of claim 148 wherein at least said majority of said reel storage spaces are adapted to store said new ones of said prepared reels of material.

150. (Currently Amended) The device of claim 149 wherein all of said reel storage spaces are adapted to store said new ones of said prepared reels of material.

151-153. (Cancelled)

154. (Previously Presented) The device of claim 119 wherein said at least one printing couple, said reel changer and said intermediate reel storage area are in a common plane.

155. (Previously Presented) The device of claim 154 including a plurality of printing couples in said web-processing machine and all on said common plane.

156. (Previously Presented) The device of claim 89 wherein said web processing machine has a single reel changer.

157. (Withdrawn) The device of claim 89 further including a web dryer having a web dryer longitudinal axis and being in said web-processing machine, and further including a secondary support carriage transport route aligned with said web dryer longitudinal axis.

158. (Withdrawn) The device of claim 157 wherein said secondary transport carriage transport route is parallel to said web dryer longitudinal axis.

159. (Cancelled)

160. (Withdrawn) The device of claim 89 further including an under floor primary transport carriage conveyance system in each of said majority of said reel storage spaces and forming said primary transport carriage drive means.

161. (Withdrawn) The device of claim 160 wherein each said under floor transport carriage conveyance system has a continuous mode of propulsion.

162. (Withdrawn) The device of claim 161 wherein said continuous mode of propulsion is a chain.

163. (Withdrawn) The device of claim 89 further including a drive for each of said plurality of primary transport carriages.

164-165. (Cancelled)

166. (Withdrawn) The device of claim 89 wherein said at least one secondary transport carriage has a separate drive.

167. (Withdrawn) The device of claim 166 wherein said at least one secondary transport carriage separate drive is independent of said primary transport carriage drive means.